

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/009529

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23F5/10 A23F5/46 A23L1/234 A23F5/24

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23F A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, FSTA, PAJ, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ARGAIZ A ET AL: "Quantitative descriptive flavor profile of five brewed Mexican coffees" FSTA, 1997, XP002271954 abstract	1-8, 11-13
X	DATABASE WPI Section Ch, Week 199246 Derwent Publications Ltd., London, GB; Class D16, AN 1992-377558 XP002271957 & JP 04 278072 A (KANEBO LTD) 2 October 1992 (1992-10-02) abstract	1-8, 10-17
	----- -/-- -----	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

12 January 2005

Date of mailing of the international search report

28/01/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Rinaldi, F

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/009529

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE FSTA 'Online! INTERNATIONAL FOOD INFORMATION SERVICE (IFIS), FRANKFURT/MAIN, DE; 2000, SOARES M ET AL: "Fruity flavour production by Ceratocystis fimbriata grown on coffee husk in solid-state fermentation." XP002271955 Database accession no. 2000-00-b0966</p>	1-8, 10-13
Y	abstract	14-17
A	<p>-&amp; SOARES ET AL: PROCESS BIOCHEMISTRY, vol. 35, no. 8, 2000, pages 857-861, XP001179854</p>	9,18,19
A	<p>EP 0 791 296 A (NESTLE SA) 27 August 1997 (1997-08-27) cited in the application</p>	1-8, 10-13
Y	column 3, line 5 - line 13	14-17
Y	<p>US 4 867 992 A (BONIELLO BARBARA ET AL) 19 September 1989 (1989-09-19) cited in the application column 1, line 10 - column 2, line 35; claims</p>	1-8, 10-17
Y	<p>DATABASE EMBASE 'Online! ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL; 1 July 2003 (2003-07-01), HAUCK T ET AL: "Formation of 4-hydroxy-2,5-dimethyl-3'2H!-furanone by Zygosaccharomyces rouxii: Identification of an intermediate" XP002271956 Database accession no. EMB-2003291945 abstract &amp; APPLIED AND ENVIRONMENTAL MICROBIOLOGY 01 JUL 2003 UNITED STATES, vol. 69, no. 7, 1 July 2003 (2003-07-01), pages 3911-3918, ISSN: 0099-2240</p>	1-8, 10-17
A	<p>LEE K G; SHIBAMOTO T: "Analysis of volatile components isolated from Hawaiian green coffee beans (Coffea arabica L.)" FLAVOUR AND FRAGRANCE JOURNAL, vol. 17, 15 April 2002 (2002-04-15), pages 349-351, XPO09031885 Table 1; Results and Discussion table 1</p>	9,18,19

-/--

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/009529

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DATABASE WPI Section Ch, Week 198825 Derwent Publications Ltd., London, GB; Class D13, AN 1988-169864 XP002271958 &amp; HU 44 914 A (TIMAR G) 30 May 1988 (1988-05-30) abstract</p> <p>-----</p>	1-8, 10-17
A	<p>US 2002/058092 A1 (HOVING HENDRIK DERK ET AL) 16 May 2002 (2002-05-16) table 2</p> <p>-----</p>	9,18,19
A	<p>EP 0 326 740 A (GEN FOODS CORP) 9 August 1989 (1989-08-09) p.5, table</p> <p>-----</p>	9,18,19
A	<p>US 5 008 125 A (CALE KENNETH W ET AL) 16 April 1991 (1991-04-16) column 3, lines 62-68; claim 1; tables</p> <p>-----</p>	9,18,19
A	<p>DATABASE FSTA 'Online! INTERNATIONAL FOOD INFORMATION SERVICE (IFIS), FRANKFURT-MAIN, DE; 1997, HEE-JUN BAIK ET AL: "Studies on the aroma components of roasted and ground coffee." XP002284838 Database accession no. 97-1-06-h0159 abstract</p> <p>-----</p>	9,18,19

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/009529

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009529

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 4278072	A	02-10-1992	NONE	
EP 0791296	A	27-08-1997	EP 0791296 A1	27-08-1997
			AT 238683 T	15-05-2003
			CA 2197481 A1	15-08-1997
			DE 69627808 D1	05-06-2003
			DE 69627808 T2	06-11-2003
			DK 791296 T3	25-08-2003
			ES 2196115 T3	16-12-2003
			JP 9220054 A	26-08-1997
			RU 2178648 C2	27-01-2002
US 4867992	A	19-09-1989	CA 1328770 C	26-04-1994
HU 44914	A	30-05-1988	HU 44914 A2	30-05-1988
US 2002058092	A1	16-05-2002	NL 1010880 C2	26-06-2000
			AT 268125 T	15-06-2004
			AU 2007000 A	31-07-2000
			CA 2356198 A1	06-07-2000
			DE 69917805 D1	08-07-2004
			EP 1139792 A1	10-10-2001
			WO 0038540 A1	06-07-2000
EP 0326740	A	09-08-1989	US 4794010 A	27-12-1988
			AT 91388 T	15-07-1993
			AU 2375988 A	03-08-1989
			CA 1328190 C	05-04-1994
			CN 1034657 A ,B	16-08-1989
			DE 3882355 D1	19-08-1993
			DE 3882355 T2	27-01-1994
			DK 552288 A	03-08-1989
			EP 0326740 A1	09-08-1989
			ES 2041807 T3	01-12-1993
			FI 884452 A ,B,	03-08-1989
			IE 62274 B1	25-01-1995
			JP 1202248 A	15-08-1989
			JP 2725811 B2	11-03-1998
			KR 9607096 B1	27-05-1996
			NO 884514 A ,B,	03-08-1989
			PH 24981 A	26-12-1990
US 5008125	A	16-04-1991	US 4900575 A	13-02-1990
			AT 116105 T	15-01-1995
			AT 149798 T	15-03-1997
			AU 626160 B2	23-07-1992
			AU 4904590 A	18-10-1990
			CA 2008111 A1	17-10-1990
			CN 1046444 A ,B	31-10-1990
			DE 69015432 D1	09-02-1995
			DE 69015432 T2	11-05-1995
			DE 69030199 D1	17-04-1997
			DE 69030199 T2	26-06-1997
			DK 398464 T3	20-03-1995
			DK 574034 T3	14-04-1997
			EP 0398464 A2	22-11-1990
			EP 0574034 A1	15-12-1993
			ES 2065476 T3	16-02-1995

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009529

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5008125	A	ES 3099872 T3	01-06-1997
		GR 3015631 T3	30-06-1995
		GR 3023456 T3	29-08-1997
		IE 66247 B1	27-12-1995
		JP 3004745 A	10-01-1991
		JP 3058652 B2	04-07-2000
		KR 135517 B1	22-04-1998
		NO 900272 A ,B,	18-10-1990